



Miskwaagamiwi-zaaga'iganiig Aki-genawendamowaad

Red Lake Department of Natural Resources

Dagwaagin
Fall 2018

Mazina'igan onji Odaakewigima
Letter from Director

IN THIS ISSUE

Ezhi-ayaag-gidakiiminaan
Environmental | 2

Giigoonyikewin
Fisheries | 4

**Miskwaagamiwi-
zaaga'iganiig
Miti-gokewin**
Forestry | 6

Ezhi-ganawenjigaadeg-Nibi
Water Resources | 8

Awesiinhya
Wildlife | 10

RED LAKE DNR

15761 High School Drive
Red Lake, MN 56671

Phone: 218-679-3959

Fax: 218-679-2830

rldnr@redlakenation.org

Visit us on the web!

www.redlakednr.org



Like our Facebook Page
Red Lake DNR

Boozhoo! This summer, the weather has been very active with storm damage occurring in several areas of the reservation during June and July followed by a very dry August. Storm damage on the morning of June 29 and the tornadoes and winds on the evening of July 11, resulted in hundreds of acres of downed and snapped off trees across several areas of the reservation. The Red Lake DNR Forestry and Fuels Programs are working hard to formulate a plan to clean up dangerous trees and combustible fuels that are near residential areas, as well as clean up other areas to maximize the natural regeneration of aspen.

This year, the Red Lake DNR partnered with the Red Lake Law Enforcement Department for the annual Cops and Bobbers and Take a Kid Fishing event held at Fullers Lake. There were 188 kids that were able to get out fishing, have a meal and take home a bag of school supplies provided by the Red Lake Tribal Council. It was a great day with many kids able to fish for an hour or more. We hope the kids had a great time and look forward to seeing them again next year!

The Red Lake Band of Chippewa was recently awarded a Tribal Wildlife Grant for work on Golden-Winged Warbler and American Woodcock monitoring, critical habitat work and young forest education. This grant will allow the Wildlife Program to continue this important work with the restoration of an additional 500 acres to improve

habitat for these species, as well as other wildlife species including deer and moose. Additionally, the American Bird Conservancy will once again be working with tribal contractors on improving an additional 500 acres on the reservation this winter. If interested, please look for the bid announcement that will be posted towards the end of September for the contract work with the American Bird Conservancy.

The Water Resources Program provides answers to some of the most common questions we receive about water resources at Red Lake. They explain the reasoning behind the timing of opening and closing the dam at the outlet and how it impacts everything downstream. Also, find some information in this newsletter about the safety of our drinking water and flowing wells.

With the fall season approaching, hunting and trapping will be starting. Stay safe and remember to take a kid hunting or fishing! The fall hunting regulations are included in this issue. Please check www.redlakednr.org for current fire danger conditions, obtaining a burning permit and other news and announcements.

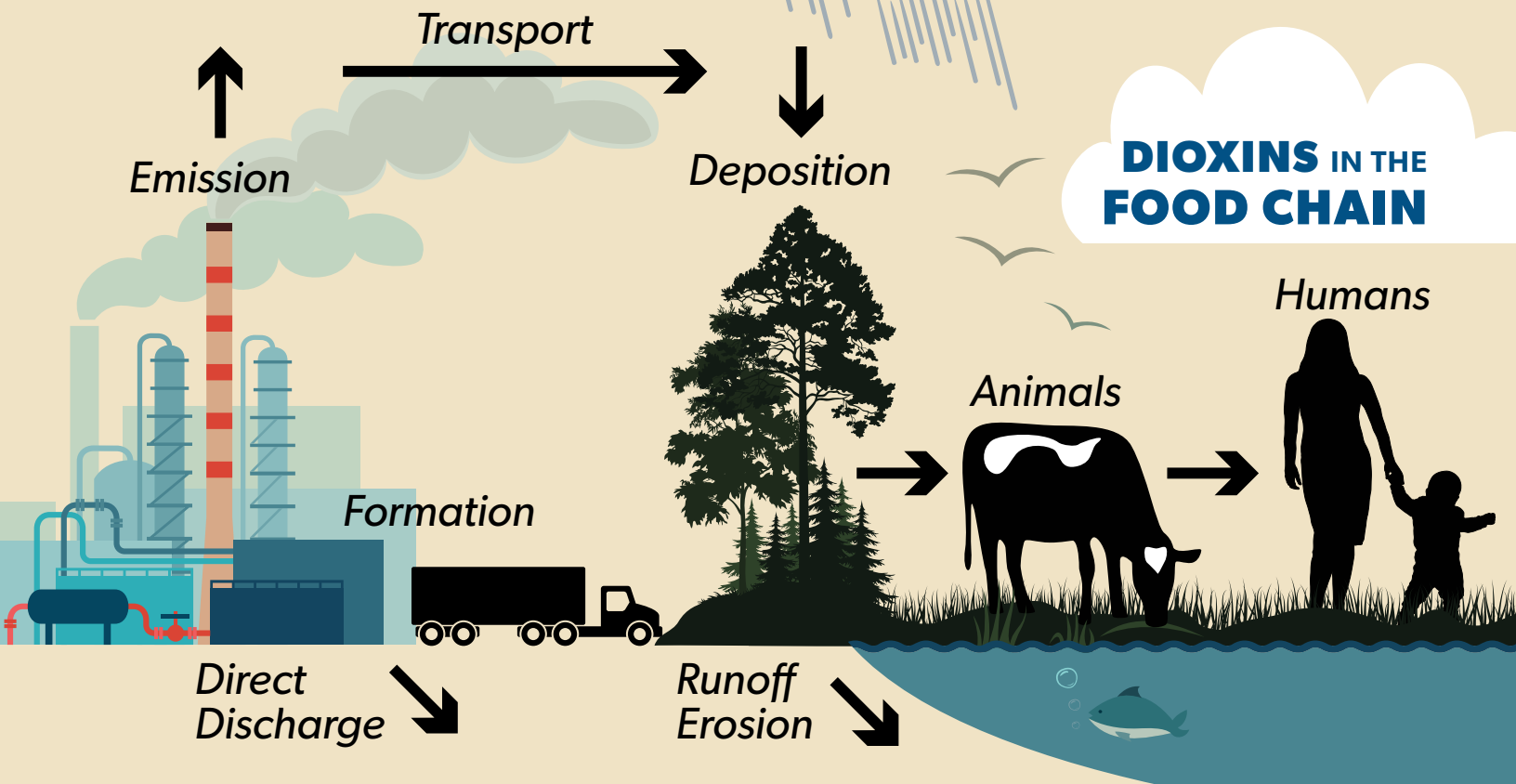
Everyone at the Red Lake DNR would like to thank you for your support and sincerely hopes that you have a great fall.

Miigwetch!

Al Pemberton

Ezhi-ayaag-gidakiiminaan

Environmental



What You Can Do:

- **REDUCE.** You can reduce the amount of waste you generate by using durable, long-lasting goods and avoiding disposable items; buying products in bulk; and looking for products with less packaging.
- **REUSE.** Reusing items is another way to reduce the amount of waste you generate. Repair, sell, or donate used or unwanted items.
- **RECYCLE.** Red Lake has begun the development of a recycling program. Currently, drop-off locations are available in many surrounding communities for recyclable materials.



- **COMPOST.** Composting is a great way to dispose of yard trimmings and food scraps, while creating a natural, free fertilizer. There are many resources available to teach homeowners how to build composting bins.
- **PROPERLY DISPOSE OF WASTE.** Don't litter or dump illegally. The Red Lake transfer station provides collection sites in the Red Lake, Redby, Ponemah, and Little Rock communities.

Your Environmental Programs are in place to protect the people and environment of the Red Lake Band of Chippewa Indians. We are available to provide guidance to the communities and anyone concerned about the environment in which we live and work. Community participation and feedback are always welcome. Together we can protect our treasured resources for ourselves, our children, and all generations to come.



YARD CLEANUP HAZARDS

Backyard Burning is a Health Hazard

Backyard burning is a more serious threat to public health and the environment than previously believed. Burning household waste produces many toxic chemicals and is one of the largest known sources of dioxins in the nation. Red Lake's Hazardous Substance Control Act (HSCA) prohibits open burning of household wastes.

DIOXINS

What are dioxins?

Dioxins are highly toxic, long-lasting organic compounds. They are dangerous even at extremely low levels and have been linked to several health problems, including cancer, and developmental and reproductive disorders.



How are dioxins formed?

Dioxins are formed when products containing carbon and chlorine are burned. Even very small amounts of chlorine can produce dioxins. Backyard and barrel burning releases significant amounts of dioxins. Trying to prevent dioxins from forming by separating out items high in chlorine content is not effective, since low levels of chlorine are present in most household trash.



How are we exposed to dioxins?

Dioxins accumulate in the food chain. Airborne dioxins can settle onto feed crops, which are then eaten by domestic meat and wildlife animals.

Dioxins also can settle on water or enter waterways through soil erosion. These dioxins accumulate in the fats of animals, and then in humans when we consume meat, fish, and dairy products.

OTHER AIR POLLUTANTS

Smoke from open burning contains hazardous pollutants such as particulate matter, sulfur dioxide, lead, mercury, and hexachlorobenzene. These pollutants can have immediate and long term health effects such as:

- Asthma, emphysema, and other respiratory illnesses.
- Nervous system, kidney, or liver damage.
- Reproductive or developmental disorders.

Not only are the people who burn trash exposed to these pollutants, but so are their families and neighbors. Children, the elderly, and those with preexisting respiratory conditions can be especially vulnerable.

ASH

The ash residue from backyard burning can contain toxic pollutants, such as mercury, lead, chromium, and arsenic, which can contaminate vegetables if scattered in gardens. Children can accidentally swallow toxic materials from dirt on their hands while playing near discarded ash.

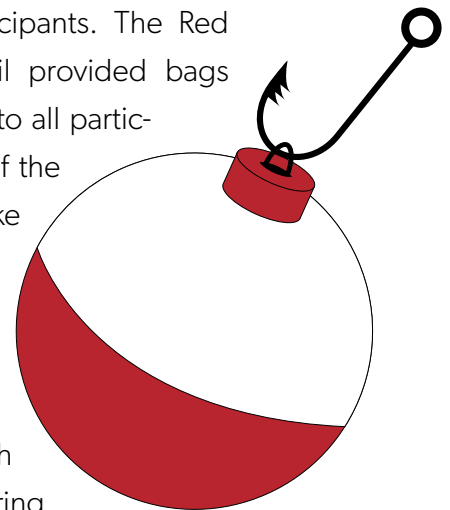




COPS & BOBBERS AND RED LAKE DNR JOINT FISHING EVENT HUGE SUCCESS

This year we partnered with the Red Lake Law Enforcement Department to put on our annual kid fishing event at Fullers Lake. The weather was great, the fish cooperated, and the kids all had a wonderful time. We would like to thank all the parents for bringing their kids and making this event a success. We had 188 kids that registered this year and with parents and volunteers, we estimate 225 people attended the event. The Public Safety and Red Lake DNR staff had seven boats running on the lake, making sure that all kids that wanted to fish were able to fish for an hour or longer. We provided Zebco fishing rods and bait to the kids that participated in the event this year. The Red Lake Trading Post, Old Dutch Chips, and Nei Bottling of Bemidji assisted with donations for the lunch, which was prepared and

served to all participants. The Red Lake Tribal Council provided bags of school supplies to all participants at the end of the day to help make sure the kids were ready for school. We hope that all the kids enjoyed themselves and wish them the best during this school year. We look forward to seeing you again next year!





Miskwaagamiwi-zaaga'iganing Mitigokewin | Forestry



*Intersection of Ponemah Road
and Highway 1 looking West.*

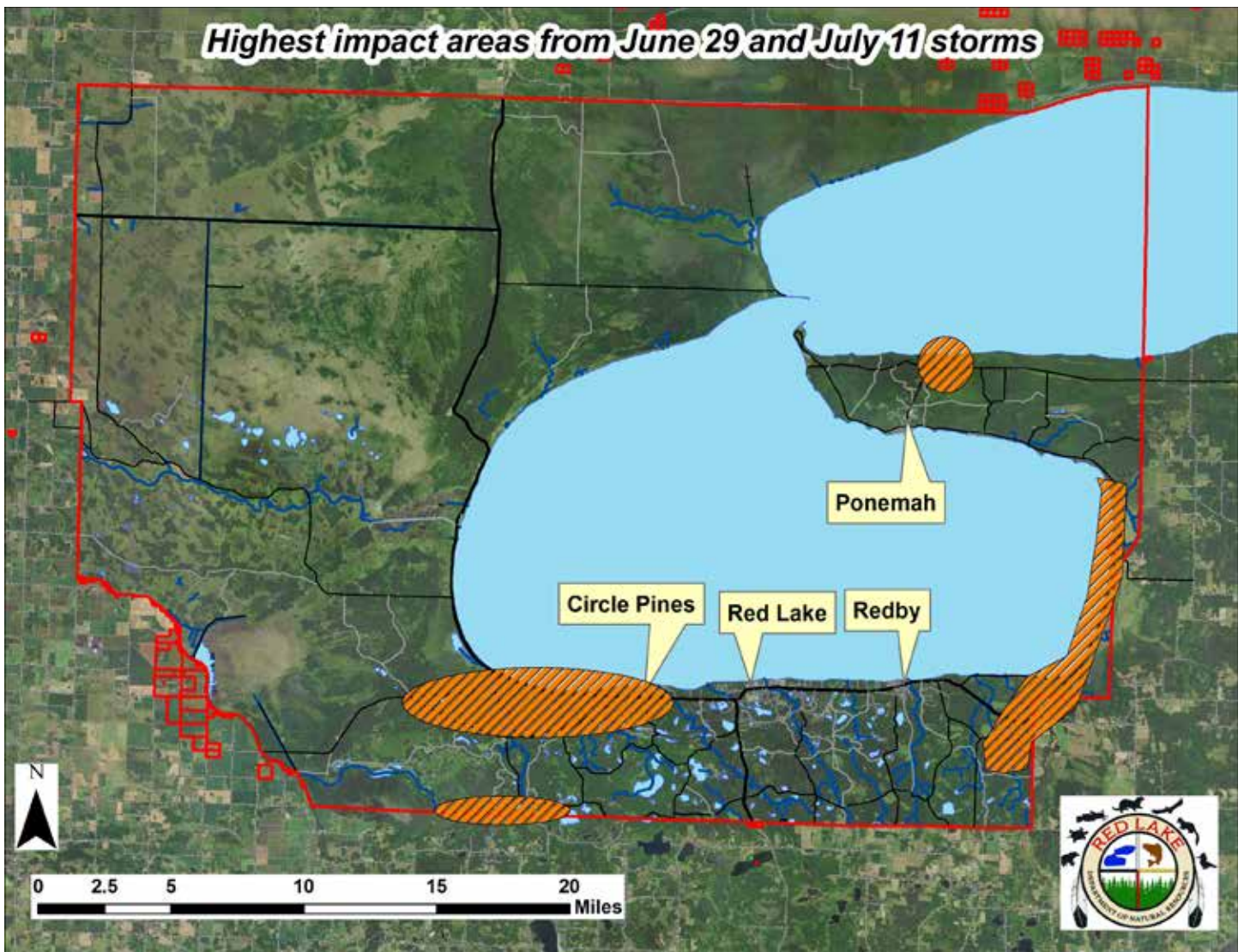
2018 STORM DAMAGE

Red Lake and surrounding areas were hit by a severe thunderstorm early on the morning of Friday, June 29. Straight-line winds were measured from 80-100 mph, and resulted in thousands of trees blown over and snapped off in the hardest-hit areas, which were primarily from the Clearbrook road up to the Battle River area. Most of the Reservation was without electricity from 5:30 am until 9 pm that night. Crews from Beltrami Electric, Red Lake Roads, Red Lake Fire Department, Red Lake Wildland Fire and Forestry, Red Lake Builders, and MN-DOT and other programs worked long hours to help the effort to restore power and open roads and driveways.

With the apparent widespread damage of the storm, Red Lake DNR Forestry personnel recognized that more areas of the forest may have storm damage not obvious from the road or trails. Aerial reconnaissance scheduled on the morning of July 12th confirmed several areas with significant damage, in addition to those in and around housing. Coincidentally, the evening previous to the scheduled flight on July 11, another series of severe storms rolled through the Ponemah area and at least 3 separate tornadoes were confirmed. Fortunately, the tornadoes were fairly short in duration causing minimal damage. Red Lake DNR staff flew the reservation again July 27 to further assess the storms' damage.



Tornado by Ponemah



The primary mission of the Forestry program is to maintain a healthy, sustainable and productive forest. This includes mitigating damage due to natural disasters that may influence the productivity of the forest, and storm damage that creates a significant amount of fuel (dead and downed trees), thereby increasing the risk of more severe wildfire. This process involves removing the fuel load and creating conditions suitable to allow the stand to naturally regenerate as soon as possible. The vast majority of the impacted acres are in areas only accessible during the winter months and require the heavy equipment needed to move large trees (skidders, bulldozers, etc.).

The Red Lake DNR Forestry Timber Sales and Fuels programs are working together to prioritize winter clean-up work. The Fuels program has a goal of managing fuel loads to minimize wildfire frequency and intensity, specifically in and around housing developments. The storm left behind a dangerous mix of combustible fuels: trees on the ground, suspended limbs and tops and broken stems. Areas closer to houses will



Buffer strip by Nine Mile Creek destroyed in wind storm

be the main focus of clean-up work to remove dangerous trees and significant fuel loads. In the areas a little farther from residences, we will be focusing on trying to regenerate the storm damaged aspen stands.

Ezhi-Ganawenjigaadeg-Nibi

Water Resources



QUESTIONS FROM THE COMMUNITY

This month we are going to provide answers to some of the most common questions we receive about water resources at Red Lake. If you have more questions you'd like us to try to answer in an upcoming newsletter, send an email through the RL DNR contact form on our website or just give us a call!

Water levels in Red Lake

One of the most common reasons we hear from the public is when there is concern over the water level of Upper and Lower Red Lake. The first set of answers will tackle some of those questions most commonly asked about water level.

When the water is high, why isn't the dam on the lake outlet open all the way in order to lower the lake?

While the US Army Corps of Engineers (US ACE) is ultimately in control of the dam and how much water is released, the short answer to this question is that all it would accomplish is to flood people downstream. The dam is extremely small compared to the volume of water in the lake: think pinhole in a swimming pool. While the dam is used to control the lake level, it only works over a period of years. The US ACE starts adjusting the dam in order to control for spring flooding in the fall. And even then it isn't always effective as we've seen in some rather wet springs. If the dam is open to its maximum capacity, 1,200 cubic feet of water per second (CFS), the lake is only lowered by 0.2 feet per month if there is no inflow,

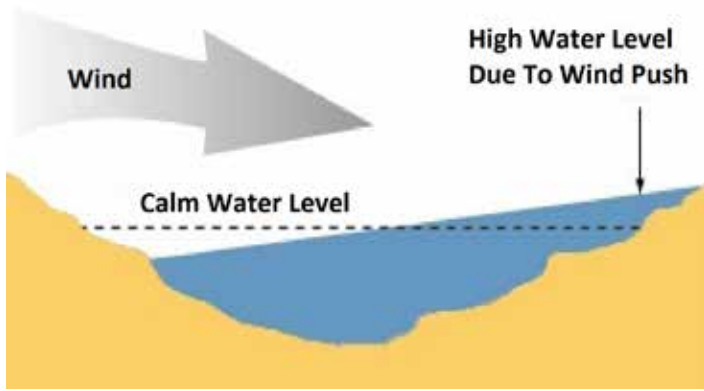
or no water coming in to the lake. In a wet year, especially in spring, there may be more than 1,200 CFS coming into the lake from some of the larger streams like the Blackduck, Battle, and Tamarac Rivers. In wet years, the general practice is to open the dam as much as possible without causing downstream flooding.

Why can't we close the dam during droughts or low water levels?

Just like opening the dam doesn't have a dramatic impact on water levels, closing it would have no real effect on the lake during drought or low water levels. However, closing it all the way could cause severe problems for waterfowl, fish, wild rice, and mussels living in the Red Lake River. Without some level of water coming through the dam and downriver, the impact to these communities could be severe.

Why did the lake level change overnight? Did the storm that went through pull water out of the lake?

It didn't, and no, but we can certainly understand why you might think that it did. Red Lake is different from the other small lakes in the area. It is huge (284,000 acres) and very shallow with a gradual slope at many of the shoreline areas. These two factors both contribute to easily observable changes in water level.



Due to the characteristics of both Upper and Lower Red Lake, the water levels can be impacted from high wind events. Whether it's a storm with high straight-line winds or multiple days of strong winds blowing the lake water in a continuous direction, the lake water levels can appear to be drastically affected. This phenomenon is commonly referred to as a storm surge or *seiche* (pronounced *saysh*). In the case of the storm from this summer, the strong straight line winds pushed more of the lake water to one side of the lake than the other. In the areas where the sandbar was exposed, if you were able take a measurement on the other side of the lake, you would find the water level had risen an equal amount to the level that it dropped on the other side. So a strong wind from the west would push the water toward the east side of the lake raising the water level at the cut off and in Waskish while lowering the water at the dam. No water is lost; it is simply being displaced by the wind and pressure changes from the storm. See the graphic in Figure 1 for a visual description. Medium to strong winds can commonly change lake level by up to a foot and can even cause some of our streams to flow backward!

Is the drinking water at Red Lake safe?

While this issue is actually a question for the Sanitation Program, we get it a lot so we'll provide an answer anyway. Yes, the public water system is safe and is monitored regularly for a number of pollutants. Private wells are only monitored whenever homeowners choose to send in a sample and usually not for as many pollutants. Sometimes you'll notice that there is a boil or do not drink notice for portions or all of the public water system. This doesn't mean that the Sanitation program isn't doing things right. In fact, it means exactly the opposite. These notices are to protect your health. There may be scheduled maintenance that opens up pipes or disturbs sediment in the system. It may also mean that some pollutant was found while monitoring the water system. On the flip side, if water from your well is suddenly contaminated, the only way you'll know is if you are personally monitoring it or if you get sick.

For more information about drinking water please contact the Sanitation Program.

Are the flowing wells safe?

Not as safe as the public water system. Unfortunately, the flowing wells (or artesian wells) on the reservation are all in relatively shallow aquifers. This isn't always a problem, but in Minnesota many shallow aquifers appear to have a higher arsenic concentration than deep wells. Arsenic is a toxic element that even in small doses over time can result in a number of health problems including cancer. While some arsenic is present in nearly all water sources in Minnesota, we recommend sticking to a known safe water source with an arsenic level below the safe drinking water level of 10 parts per billion. The public water system is maintained below this level. If you have a private well and haven't had it tested for arsenic, we strongly encourage you to get it tested. Call the Sanitation Department for assistance.

How is the lake overall?

The water quality of Red Lake is excellent. Red Lake is located in the headwaters of our watershed meaning most of the water coming into the lake is coming from the immediate surrounding area. We have no major industry, water treatment facilities, mining, or other activities that would greatly reduce water quality. It is a unique lake and has naturally higher levels of phosphorus than many of the surrounding lakes. Phosphorus is a necessary element for all life but can cause problems in very high concentrations resulting in algal blooms (pea soup looking water). Red Lake's phosphorus levels are at a level that results in some algal blooms but also allow for maximal productivity. This is why it is such a great lake for walleye production. The effects of climate change are always in the back of our minds and may result in more problems with algae, so we monitor the lake regularly (every two weeks in the summer).





RED LAKE BAND OF CHIPPEWA AWARDED A TRIBAL WILDLIFE GRANT FOR GOLDEN-WINGED WARBLER AND AMERICAN WOODCOCK HABITAT WORK

Since the mid-1960's, golden-winged warblers have declined 60% across their historic range. The species is listed as threatened in Canada and on the verge of being listed on the Endangered Species List in the United States. Currently, the Great Lakes golden-winged warbler population is estimated to represent around 95% of the entire global breeding population. Minnesota contains less than 10% of the golden-winged warbler's breeding range, but supports an estimated 47% of the entire global breeding population. Research suggests that conservation and management activities conducted in Minnesota will be crucial for the survival of this species.

The golden-winged warbler is a small songbird with striking yellow and black features. Adults are about 5 inches long, weigh between 0.3 and 0.4 ounces, and are slightly smaller than the well-known black-capped chickadee. They are neotropical migrants, spending three to four months (mid-May to mid-September) in the United States during

the breeding season, then wintering in Central and South America. They typically nest on the ground in dense herbaceous vegetation and lay 3 to 6 eggs. Eggs are incubated for 10-12 days and hatchlings stay in the nest for 8-9 days. Golden-winged warblers feed on non-flying insects and insect larvae.

American woodcocks are a chunky bird, about 11" long, with a long bill, bars across their crown, and large eyes set high up on their head. They have rounded wings and are a nocturnal and secretive bird that are common in moist woodlands. At dusk and dawn, males fly up abruptly and their wings make a twittering sounds. In the spring, the woodcock makes a call that sounds like a nasal peent. Hens nest in exposed sites on the ground, usually in young, shrubby, deciduous forests. They lay between 1-5 eggs and incubate them for 20-22 days. They feed on mainly earthworms, but also snails, millipedes, spiders, flies, beetles, and ants. The number of American woodcocks have been steadily declining since

1966 with the loss of habitats to urbanization, agricultural development and maturing forests.

During the winters of 2015 - 2018, the Red Lake DNR participated in a partnership with the American Bird Conservancy and Tamarac National Wildlife Refuge to restore over 1,100 acres of young forest habitat on the Red Lake Reservation. This was the beginning of long-term, large-scale efforts to create and maintain young forest habitats at Red Lake. To continue this important work, the Red Lake Band of Chippewa Indians applied for and was recently awarded a U.S. Fish and Wildlife Service Tribal Wildlife Grant for golden-winged warbler and American woodcock monitoring, critical habitat restoration, and young forest education on the reservation.

Red Lake DNR – Wildlife Program will conduct research on 44,000 acres of tribal land to identify potential American woodcock and golden-winged warbler habitat restoration sites. Breeding bird counts will be conducted to evaluate restoration efforts and develop maps to illustrate the best sites for restoration efforts. The research will assist Red Lake in making decisions towards restoring



existing habitat or creating 500 acres of new young and mixed aged forests. Work in these areas will create early successional habitats, with interspersed clumps of shrubs and saplings and areas of grasses and forbs. The vegetation types created within these treatment areas will benefit several different wildlife species, including moose, deer, and songbirds. Additionally, the research will help Red Lake update their management plan for both golden-winged warblers and American woodcocks on the reservation. An important long-term goal is to maintain the habitat diversity and promote early successional species in the treated areas.



PRST STD
U.S. POSTAGE
PAID
MAILED FROM 56601
PERMIT NO. 30

RED LAKE DNR
15761 High School Drive
Red Lake, MN 56671
www.redlakednr.org

POSTAL CUSTOMER
ECRWSS EDDM

RED LAKE HUNTING REGULATIONS

RED LAKE TRIBAL MEMBERS

Waterfowl: No closed season, no bag limits, except in designated waterfowl production areas (Kiwosay, Zah Gheeng). Limited or no harvest of waterfowl is recommended during spring and summer.

Small Game: No closed season, no bag limits. Limited or no harvest of small game is recommended during spring and summer.

Big Game: Season is from September 15 through December 31, with no harvest limit.

Moose: SEASON IS CLOSED per Tribal Resolution



NON-MEMBERS

All Permits may be purchased at the Red Lake Department of Public Safety. Deer and small game permits are seasonally available at the Northwest Angle.

Waterfowl: Seasons and bag limits are the same as in state and federal regulations. Allowed only on designated portions of the Diminished Reservation. Tribal Guide required.

Small Game: Ceded lands and Northwest Angle only. Seasons and bag limits are the same as MN state regulations.

Big Game: Deer hunting allowed at Northwest Angle only, with season concurrent with Minnesota's Zone-1 deer season. Tribal officials may issue special "non-member relative" permits for hunting on the Diminished Reservation.



Seasons, limits and other regulations are subject to revision at any time by the Red Lake Tribal Council. Questions pertaining to hunting opportunities on Red Lake lands should be directed to the RL Department of Public Safety (218)-679-3315, or RL Department of Natural Resources (218)-679-3959.

Please help protect our natural resources. Respect tribal regulations and report any violations of fish and game laws to the Red Lake Department of Public Safety.

